

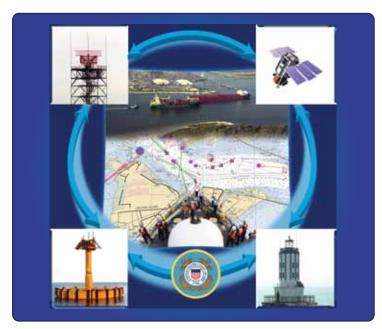
NATIONWIDE MADE AUTOMATIC MENTIFICATION STORY SYSTEM

PROJECT DESCRIPTION:

The Coast Guard's Nationwide Automatic Identification System (NAIS) is designed to enhance maritime domain awareness, with a particular focus on improving maritime security, marine and navigational safety, search and rescue, and environmental protection services. NAIS is based on the Automatic Identification System (AIS) sanctioned by the International Maritime Organization as a global standard for ship-to-ship, ship-to-shore and shore-to-ship maritime communications. NAIS uses digital VHF technology to continually transmit and receive voiceless data.

AIS data (e.g., vessel location, course and speed) is combined with other government information and sensor data to form a holistic-overarching view of maritime vessel traffic near continental U.S. and territorial waters.

Armed with a comprehensive view of the nation's waters, decision-makers are better positioned to respond to safety and security risks. NAIS improves the safety of vessels and ports through collision avoidance and strengthens national security through



detection, identification and classification of potential threats while they are still offshore.

The Coast Guard's NAIS acquisition strategy is founded on the principles of minimizing cost and performance risks, while maximizing the use of commercially available technology. NAIS leverages existing government infrastructure and will deliver capabilities in three discrete, useable increments.

FEATURES & INCREMENTS

- Upon completion, NAIS will consist of a land, sea and space-based AIS radio frequency infrastructure capable of receiving, and transmitting information to AIS-equipped vessels located in U.S. coastal zones, waterways and ports. AIS messages will also be received by various aids to navigation, search and rescue units and maritime air and sea military units.
- NAIS increment one, accomplished in 2008, used existing infrastructures to provide AIS shore-based receive capabilities within 58 major ports and 16 critical coastal areas.
- Increment two is seeking to leverage the Coast Guard's Rescue 21 command-and-control
 infrastructure to provide shore-based AIS receive coverage out to 50 nautical miles (nm) and transmit
 capability out to 24 nm along the entire U.S. coastline. In 2010, NAIS completed a low-earth-orbit
 satellite demonstration which showed space-based AIS technology as having clear worldwide vessel
 tracking benefits.
- Upon implementation, increment three will seek to expand AIS receive coverage from 50 nm to 2000 nm along the entire U.S. coastline via a combination of satellite and VHF services on offshore platforms and data buoys.